

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS

Claim 1 (currently amended): A composite material comprising:

a fiber fabric; and

a matrix phase formed of silicon carbide adhered to the fiber fabric, wherein the fiber fabric comprises:

main constitutional fibers formed of silicon carbide; and

auxiliary fibers formed of carbon, wherein having characteristics that compensate for changed characteristics of the main constitutional fibers when the main constitutional fibers are exposed to a high temperature atmosphere, wherein:

the main constitutional fibers are formed from any one of the group consisting of silicon carbide, carbon, silicon nitride, silicon oxide, aluminum oxide, YAG, and a heat resistant metal;

the auxiliary fibers have a different composition from that of the main constitutional fibers and are formed from any one of the group consisting of silicon carbide, carbon, silicon nitride, silicon oxide, aluminum oxide, YAG, and a heat resistant metal;

the main constitutional fibers and auxiliary fibers are stranded together; and

the matrix phase is formed from any one of the group consisting of silicon carbide, carbon, zirconium carbide, silicon nitride, silicon oxide, aluminum oxide, zirconium oxide, hafnium oxide, YAG, and a heat resistant metal

the main constitutional fibers and the auxiliary fibers are stranded together such that the auxiliary fibers suppress differences in thermal elongation between the fiber fabric and the matrix phase under a high temperature atmosphere, and residual stress or stress during use, which acts on the matrix phase and is caused by the differences in thermal elongation, remains less than a breaking stress of the matrix phase, and

the mixture proportion of the auxiliary fibers relative to the main constitutional fibers is less than 90%.

Claims 2-9 (canceled).

Claim 10 (original): The composite material according to claim 1, wherein the auxiliary fibers are included in a predetermined density distribution in the fiber fabric.

Claim 11 (original): The composite material according to claim 10, wherein the density distribution of the auxiliary fibers in the fiber fabric gradually changes in a plate thickness direction.

Claim 12 (currently amended): A method of producing a composite material which comprises a fiber fabric including main constitutional fibers formed of silicon carbide and auxiliary fibers formed of carbon ~~having characteristics that compensate for changed characteristics of the main constitutional fibers when the main constitutional fibers are exposed to a high temperature atmosphere~~, and a matrix phase formed of silicon carbide and adhered to the fiber fabric, comprising the steps of:

forming the fiber fabric by stranding together the main constitutional fibers and the auxiliary fibers such that the auxiliary fibers suppress differences in thermal elongation between the fiber fabric and the matrix phase under a high temperature atmosphere, and residual stress or stress during use, which acts on the matrix phase and is caused by the differences in thermal elongation, remains less than a breaking stress of the matrix phase; and

adhering the matrix phase onto the fiber fabric, wherein:

—— the main constitutional fibers are formed from any one of the group consisting of silicon carbide, carbon, silicon nitride, silicon oxide, aluminum oxide, YAG, and a heat resistant metal;

—— the auxiliary fibers have a different composition from that of the main constitutional fibers and are formed from any one of the group consisting of silicon carbide, carbon, silicon nitride, silicon oxide, aluminum oxide, YAG, and a heat resistant metal; and

—— the matrix phase is formed from any one of the group consisting of silicon carbide, carbon, zirconium carbide, silicon nitride, silicon oxide, aluminum oxide, zirconium oxide, hafnium oxide, YAG, and a heat resistant metal the mixture portion of the auxiliary fibers relative to the main constitutional fibers is less than 90%.

Claim 13 (previously presented): The method of producing a composite material according to claim 12, wherein at least a portion of the matrix phase is formed by a CVI method.

Claim 14 (previously presented): The method of producing a composite material according to claim 12, wherein at least a portion of the matrix phase is formed by a PIP method.

Claim 15 (previously presented): The method of producing a composite material according to claim 12, wherein at least a portion of the matrix phase is formed by a slurry method.

Claim 16 (previously presented): The method of producing a composite material according to claim 12, wherein at least a portion of the matrix phase is formed by a reactive sintering method.

Claim 17 (previously presented): The method of producing a composite material according to claim 12, wherein the fiber fabric is formed after combining a bundle of the main constitutional fibers together with a bundle of the auxiliary fibers so as to form a strand.

Claim 18 (previously presented): The method of producing a composite material according to claim 12, wherein the fiber fabric is formed after dispersing and then blending together the main constitutional fibers and the auxiliary fibers so as to form a strand.

Claim 19 (previously presented): The method of producing a composite material according to claim 12, wherein the fiber fabric is formed by arranging the bundle of the main constitutional fibers and the bundle of the auxiliary fibers in predetermined proportions.

Claim 20 (previously presented): The method of producing a composite material according to claim 12, wherein the fiber fabric is formed by separating the bundle of the main constitutional fibers and the bundle of the auxiliary fibers into threads that have a predetermined thickness.

Claim 21 (previously presented): The method of producing a composite material of claim 12, wherein stranding together of the main constitution of fibers and auxiliary fibers forms strands.

Claim 22 (previously presented): The composite material of claim 1, wherein the main constitutional fibers and auxiliary fibers are stranded together in strands.

Claim 23 (previously presented): The composite material of claim 22, wherein a bundle of the main constitutional fibers is combined with a bundle of the auxiliary fibers in a strand.

Claim 24 (previously presented): The composite material of claim 22, wherein the main constitutional fibers and the auxiliary fibers are blended together in a strand.